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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|----------------|----------------------|-------------------------|------------------|
| 09/171,043 | 10/09/1998 | PAUL M. KONNERSMAN | 08086/002002 | 7577 |
| 7: | 590 11/20/2002 | | | |
| Hale and Dorr, LLP | | | EXAMINER | |
| 60 State Street Boston, MA 0 | | | LASTRA, DAN | |
| | | • | ART UNIT | PAPER NUMBER |
| | | | 3622 | |
| | | | DATE MAILED: 11/20/2002 | • |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u></u> | | | | | |
|---|--|---------------------|--|--|--|
| | Application No. | Applicant(s) | | | |
| Office Action Summers | 09/171,043 | KONNERSMAN, PAUL M. | | | |
| Office Action Summary | Examin r | Art Unit | | | |
| The MAILING DATE of this communication and | DANIEL LASTRA | 3622 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1) Responsive to communication(s) filed on <u>09 S</u> | <u>September 2002</u> . | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | This action is FINAL. 2b)⊠ This action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | |
| 4) Claim(s) 1-29 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>1-29</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6) Other: | | | | | |

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1. Claims 1-29 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-29 have been rejected under 35 U.S.C. 102(e) as being anticipated by Swenson et al (U.S. 5,490,097).

As per claim 1, Swenson et al teach:

A method for managing work processes comprising:

instantiating project models as instances of a work process model comprised of interdependent decisions, to which said project models conform (see column 2),

rendering said process models as elements of a computer-based system in support of the work process (see columns 1 and 2) and

rendering said project models as elements of a computer-based system in support of the work process (see columns 1-2).

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As per claim 2, Swenson et al teach:

A computer implemented method for modeling work processes comprising instantiating a plurality of objects by abstract or concrete classes, and including at least a decision class and a data class (see column 3),

relating each decision object to one or more data objects which it produces, requiring, for at least one decision object, at least one data object as a prerequisite to its activation or completion thereby establishing an interdependence between the decision object requiring said data and the decision object providing said data (see column 2, lines 45-67)

optionally generating additional subclasses or instances of said decision and data classes (see column 13).

As per claim 3, Swenson et al teach:

The method of claim 2 further comprising relating an arc or link class linking a first decision with a second decision (see column 13)

As per claim 4, Swenson et al teach:

The method of claim 2 further comprising:

generating a decision role class specialized into at least two subclasses, each with differing behaviors (see figure 2 and column 13)

defining for each decision role class the communication requirements among the incumbents of roles participating in a decision, the rights of each such role class incumbents with respect to (a) entering data elements in a database, (b) modifying

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elements in a database and/or (c) reading elements from a database (see column 8, lines 37-50).

As per claim 5, Swenson et al teach:

A computer implemented method for traversing networks including nodes and directed arcs comprising:

utilizing messaging between said nodes and arcs and collections of said arcs, and determining the membership of said collections by at least one of their entry nodes and exit nodes (see figure 2).

As per claim 6, Swenson et al teach:

A computer implemented method of modeling and managing decision-making work processes among a plurality of participants comprising:

using a network whose nodes are abstract decision situations, and providing arcs directed by decisions based on logical precedence (see figure 2)

As per claim 7, Swenson et al teach:

The method of claim 6 further comprising:

requiring nodes to support participation of multiple persons in differentiated roles (see figure 1).

As per claim 8, Swenson et al teach:

The method of claim 7, further comprising:

requiring that incumbents of exactly one differentiated role make a choice modeled by an abstract decision situation (see figures 1 and 2);

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requiring that the incumbents of a second differentiated role have notice, elapsed time and access to the incumbent of the first role prior to the incumbent of said first role having made said choice (see figures 1 and 2),

requiring that the incumbents of a third differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results, with or without reference to established criteria (see figures 1 and 2), and

requiring that the incumbents of a fourth differentiated role have timely notice of the results of the choice made by the incumbent of the first role after said choice (see figures 1 and 2).

As per claim 9, Swenson et al teach:

The method of claim 8, further comprising:

requiring that the incumbents of a fifth differentiated role have the opportunity to inspect the results of the choice made by the incumbent of the first role after said choice, and to accept or reject said results according to its conformance or non-conformance to established criteria (see figures 1-21)

As per claim 10, Swenson et al teach:

The method of claim 1, further comprising:

using said process models to instantiate project models (see figures 1 and 2), and

using said process and project models to manage, direct, and control the work of the process (see figures 1 and 2).

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As per claim 11, Swenson et al teach:

The method of claim 2 further comprising:

providing a rule class as a subclass of the data class (see figure 2a),

providing that instances of said rule class may be specified by a concrete decision class for use to completely determine the result of instances of said decision class by choosing the value of its associated decision's data object (see figure 2a), and/or

contingently determine (i) the associated decision objects' requirement for some other specific data object, (ii) the associated decision objects' association with a specific role object, (iii) the incumbent of a specific role object associated with said decision object, and/or (iv) the use of a different rule object associated with said decision object (see figures 1-21).

As per claim 12, Swenson et al teach:

A computer implemented method for managing work processes comprising instantiating project models as instances of a decision process model comprised of interdependent decisions, to which said project models conform (see figures 1 and 2),

modeling processes using an extensible, object-oriented framework, and mapping plural participants in the process using objects representing abstract and concrete classes as elements of said framework (see columns 7-13).

As per claim 13, Swenson et al teach:

A computer implemented decision-making method for traversing work process models including nodes and directed arcs connecting said nodes comprising

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initializing all directed arcs and arc collections with an inactive state (see column 5, lines 47-67),

activating an entry collection of directed arcs which share a common entry node upon completion of the entry node's function (see column 5, lines 47-67),

activating all members of said entry collection upon activation of said entry collection (see column 5, lines 47-67 – column 6, lines 1-29),

activating an exit collection of directed arcs which share a common exit node upon activation of any member of said exit collection (see column 5, lines 47-67 – column 6, lines 1-29), and

testing, upon activation of said exit collection other members of said exit collection for said member's active/inactive state and if any member of said exit collection is inactive, then stop testing and return said exit collection to its inactive state, and otherwise, if all members have tested active, activate their common exit node (see column 5, lines 47-67 – column 6, lines 1-29).

As per claim 14, Swenson et al teach:

A method for managing work processes comprising:

using an object-oriented application framework to build and configure decision process models comprised of interdependent decisions (see figure 2),

rendering said process models as elements of a computer-based system in support of the work process (see column 5, lines 30-67 – column 6, lines 1-29; figure 2)

instantiating project models as instances of said process models (see columns 5-6), and

rendering said project models as elements of a computer-based system in support of the work process (see columns 5-6).

As per claim 15, Swenson et al teach:

The method of claim 14 further comprising:

rendering said process models as directed graphs, whose nodes are abstract classes modeling decisions, and whose directed arcs or edges model dependencies between the nodal classes (see figure 2), and

rendering said project models as a partition of the graph of the instantiating process, where such partition is defined by a specified node from the process graph and all and only those other nodes that are dependent on said specified node (see columns 5-7).

As per claim 16, Swenson et al teach:

A computer implemented method for traversing work process network models which are composed of nodal objects and directed arc objects connecting said nodal objects comprising:

setting the state of every said directed arc object based upon the state of the nodal object at the initial or entry node of said directed arc object (see figure 2),

testing the state of every directed arc object in a collection of directed arc objects, when any directed arc object in said collection changes state, where the members of said collection are all and only those directed arc objects which have the same terminal or exit node (see figure 2), and

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setting the state of the nodal object at the terminal or exit node of a collection of said directed arc objects based on the collective states of all members of the collection, where the members of said collection are all and only those directed arc objects which have the same terminal or exit node (see figure 2).

As per claim 17, Swenson et al teach:

A computer implemented method of modeling and managing work processes comprising:

using a network or graph whose nodes are abstract decision situations representing choices to be made, which choices are modeled by concrete decision classes and by instances of those classes (see columns 5-7), and

providing arc objects directed in each instance by the ordered pair of concrete decision classes associated with each arc object, where the entry or initial member of said ordered pair produces the data result required by the exit or terminal member of said ordered pair (see columns 5-7).

As per claim 18, Swenson et al teach:

The method of claim 17 further comprising requiring each concrete decision class to support participation of multiple persons in differentiated roles (see figure 1).

As per claim 19, Swenson et al teach:

The method of claim 18, further comprising:

requiring that incumbents of-one differentiated role associated with a concrete decision class, make-the choice modeled by-said concrete decision class (see figures 1-2 and columns 5-7), and

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requiring that the incumbents of a second differentiated role associated with a

concrete decision class, have notice, elapsed time and access to the incumbent of the

first role prior to the incumbent of said first role having made said choice (see figures 1-

2 and columns 5-7),

requiring that the incumbents of a third differentiated role associated with a

concrete decision class, have opportunity to inspect the results of the choice made by

the incumbent of the first role after said choice, and to accept or reject said results

without or without reference to established criteria (see figures 1-2 and columns 5-7),

and

requiring that the incumbents of a fourth role associated with a concrete decision

class, have timely notice of the results of the choice made by the incumbent of the first

role after said choice has been made (see figures 1-2 and columns 5-7).

As per claim 20, Swenson et al teach:

The method of claim 19, further comprising requiring that the incumbents of a

fifth differentiated role associated with a concrete decision class, have the opportunity to

inspect the results of the choice made by the incumbent of the first role after said

choice, and to accept or reject said results, but only according to its conformance or

non-conformance to established criteria (see figures 1-2 and columns 5-7).

As per claim 21, Swenson et al teach:

An object-oriented application framework for building work process models

comprising:

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an abstract, extensible decision class which encapsulates the common attributes

and methods needed to model a decision or choice to be made (see figures 1-2 and

columns 5-7),

an abstract, extensible data class which encapsulates the common attributes and

methods needed to model the data result produced by the decision which is modeled by

the abstract decision class, or alternatively (see figures 1-2 and columns 5-7),

a single abstract, extensible class which combines the attributes and methods of

said abstract decision and data classes (see figures 1-2 and columns 5-7).

As per claim 22, Swenson et al teach:

The framework of claim 21 further comprising a concrete directed arc class,

which encapsulates the attributes and methods needed to model the dependency

relationship between concrete decision classes, or instances of those classes, at the

nodes of the directed arc instances, where such dependency arises from the

requirement by one decision, the terminal or exit decision, for data produced by another

decision, the initial or entry decision (see figures 1-2 and columns 5-7).

As per claim 23, Swenson et al teach:

The framework of claim 22 further comprising an abstract decision role class

which encapsulates the common attributes and methods needed to model the

participation of people in a decision modeled by a concrete decision class (see figures

1-2).

As per claim 24, Swenson et al teach:

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The framework of claim 23 further comprising a concrete decision manager class as one specialization of the decision role class, where the role modeled by said decision manager class has the right to make the decision or choice modeled by the associated concrete decision class (see figures 1-2 and columns 5-7).

As per claim 25, Swenson et al teach:

The framework of claim 24 further comprising a concrete approver class as an additional specialization of the decision role class, where the role modeled by said approver class has the right to veto said decision or choice (see figure 1, item 36).

As per claim 26, Swenson et al teach:

The framework of claim 25 further comprising a concrete consultee class as an additional specialization of the decision role class, where the role modeled by said consultee class has the right to an opportunity to influence the decision or choice before said choice is made, but not the opportunity to veto said decision or choice (see figure 1).

As per claim 27, Swenson et al teach:

The framework of claim 26 further comprising a concrete informee class as an additional specialization of the decision role class, where the role modeled by said informee class has the right to be timely informed of the result of making said decision or choice (see figure 1)

As per claim 28, Swenson et al teach:

The framework of claim 27 further comprising a concrete inspector class as an additional specialization of the decision role class, where the role modeled by said

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established criteria (see figure 1).

As per claim 29, Swenson et al teach:

The framework of claim 28 further comprising a concrete rule class as a specialization of the data class, where an instance of said rule class may be specified by a concrete decision class for use in (a) making the decision or choice modeled by said decision class, (b) contingently determining the dependency of the decision

inspector class has the right to veto said decision or choice, but only as it fails to meet

modeled by said decision class on the result modeled by some other concrete decision

class, or (c) contingently determining the participation and role of persons in the

decision or choice modeled by said concrete decision class (see figures 1-2 and

columns 5-7).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 703-306-5933. The examiner can normally be reached on 7:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W STAMBER can be reached on 703-305-8469. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

D.C

Daniel Lastra

November 6, 2002

MELANIE A. KEMPER PRIMARY EXAMINER